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PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. 2269-3091.US5 (96-0890.04/US)

First Inventor Salman Akram

Title METHODS OF FABRICATING SEMICONDUCTOR SUBSTRATE-BASED BGA INTERCONNECTION

Express Mail Label No. EV348044998US

10/602253 PTO

06/23/03

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2.  Applicant claims small entity status.  
See 37 CFR 1.27.
3.  Specification [Total Pages 15]  
(preferred arrangement set forth below)  
 - Descriptive title of the Invention  
 - Cross Reference to Related Applications  
 - Statement Regarding Fed sponsored R & D  
 - Reference to sequence listing, a table,  
 or a computer program listing appendix  
 - Background of the Invention  
 - Brief Summary of the Invention  
 - Brief Description of the Drawings (if filed)  
 - Detailed Description  
 - Claim(s)  
 - Abstract of the Disclosure
4.  Drawing(s) (35 U.S.C.113) [Total Sheets 11]
5. Oath or Declaration [Total Pages 1]  
 a.  Newly executed (original or copy)  
 b.  Copy from a prior application (37 CFR 1.63 (d))  
 (for a continuation/divisional with Box 18 completed)  
 i.  DELETION OF INVENTOR(S)  
 Signed statement attached deleting inventor(s)  
 named in the prior application, see 37 CFR  
 1.63(d)(2) and 1.33(b).
6.  Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO:**Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

7.  CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
- a.  Computer Readable Form (CRF)  
 b. Specification Sequence Listing on:  
 i.  CD-ROM or CD-R (2 copies); or  
 ii.  paper  
 c.  Statements verifying identity of above copies

**ACCOMPANYING APPLICATIONS PARTS**

9.  Assignment Papers (cover sheet & document(s))
10.  37 C.F.R. §3.73(b) Statement  Power of  
(when there is an assignee) Attorney
11.  English Translation Document (if applicable)
12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS  
Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15.  Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16.  Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17.  Other: Copy of Associate Power of Attorney (2 pgs.)

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,  
or in an Application Data Sheet under 37 CFR 1.76: Continuation     Divisional     Continuation-in-part (CIP)

of prior application No: 09 / 649,225

Prior application information: Examiner T. Pham

Group / Art Unit: 2813

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied  
under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference.  
The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.**19. CORRESPONDENCE ADDRESS** Customer Number or Bar Code Label**\*24247\***24247  
PATENT TRADEMARK OFFICEor  Correspondence address below

|         |           |  |          |  |
|---------|-----------|--|----------|--|
| Name    |           |  |          |  |
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| City    | State     |  | Zip Code |  |
| Country | Telephone |  | Fax      |  |

Name (Print/Type) Tawni L. Wilhelm Registration No. (Attorney/Agent) 47,456

Signature *Tawni L. Wilhelm* Date June 23, 2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1:27**TOTAL AMOUNT OF PAYMENT**(\$)  
750

| Complete if Known    |                               |
|----------------------|-------------------------------|
| Application Number   | To be assigned                |
| Filing Date          | June 23, 2003                 |
| First Named Inventor | Salman Akram                  |
| Examiner Name        | To be assigned                |
| Group / Art Unit     | To be assigned                |
| Attorney Docket No.  | 2269-3091.5US (96-0890.04/US) |

**METHOD OF PAYMENT (check all that apply)**

Check    Credit card    Money    Other    None  
Order

 Deposit Account:Deposit  
Account  
Number

20-1469

Deposit  
Account  
Name

TraskBritt

The Commissioner is authorized to: (check all that apply)  
 Charge fee(s) indicated below    Credit any overpayments  
 Charge any additional fee(s) during the pendency of this application  
 Charge fee(s) indicated below, except for the filing fee  
to the above-identified deposit account.

**FEE CALCULATION****1. BASIC FILING FEE****Large Entity**   **Small Entity**

| Fee Code            | Fee (\$) | Fee Code | Fee (\$) | Fee Description        | Fee Paid |
|---------------------|----------|----------|----------|------------------------|----------|
| 1001                | 750      | 2001     | 375      | Utility filing fee     | 750      |
| 1002                | 330      | 2002     | 165      | Design filing fee      |          |
| 1003                | 520      | 2003     | 260      | Plant filing fee       |          |
| 1004                | 750      | 2004     | 375      | Reissue filing fee     |          |
| 1005                | 160      | 2005     | 80       | Provisional filing fee |          |
| <b>SUBTOTAL (1)</b> |          |          |          | <b>(\$)</b> 750        |          |

**2. EXTRA CLAIM FEES**

| Total Claims       | 8 | -20 ** | = 0 | X 18 | = 0 | Extra Claims | Fee from below | Fee Paid |
|--------------------|---|--------|-----|------|-----|--------------|----------------|----------|
| Independent Claims | 1 | -3 **  | = 0 | X 84 | = 0 |              |                |          |
| Multiple Dependent |   |        |     | X    | = 0 |              |                |          |

**Large Entity**   **Small Entity**

| Fee Code            | Fee (\$) | Fee Code | Fee (\$) | Fee Description  |
|---------------------|----------|----------|----------|--|
| 1202                | 18       | 2202     | 9        | Claims in excess of 20                                     |
| 1201                | 84       | 2201     | 42       | Independent claims in excess of 3                          |
| 1203                | 280      | 2203     | 140      | Multiple dependent claim, if not paid                      |
| 1204                | 84       | 2204     | 42       | ** Reissue independent claims over original patent         |
| 1205                | 18       | 2205     | 9        | ** Reissue claims in excess of 20 and over original patent |
| <b>SUBTOTAL (2)</b> |          |          |          | <b>(\$)</b> 0  |

\*\* or number previously paid, if greater; For Reissues, see above

**3. ADDITIONAL FEES****Large Entity**   **Small Entity**

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description  | Fee Paid |
|----------|----------|----------|----------|--|----------|
| 1051     | 130      | 2051     | 65       | Surcharge - late filing fee or oath  |          |
| 1052     | 50       | 2052     | 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053     | 130      | 1053     | 130      | Non-English specification  |          |
| 1812     | 2,520    | 1812     | 2,520    | For filing a request for reexamination                                     |          |
| 1804     | 920*     | 1804     | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805     | 1,840*   | 1805     | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251     | 110      | 2251     | 55       | Extension for reply within first month                                     |          |
| 1252     | 410      | 2252     | 205      | Extension for reply within second month                                    |          |
| 1253     | 930      | 2253     | 465      | Extension for reply within third month                                     |          |
| 1254     | 1,450    | 2254     | 725      | Extension for reply within fourth month                                    |          |
| 1255     | 1,970    | 2255     | 985      | Extension for reply within fifth month                                     |          |
| 1401     | 320      | 2401     | 160      | Notice of Appeal   |          |
| 1402     | 320      | 2402     | 160      | Filing a brief in support of an appeal                                     |          |
| 1403     | 280      | 2403     | 140      | Request for oral hearing   |          |
| 1451     | 1,510    | 1451     | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452     | 110      | 2452     | 55       | Petition to revive – unavoidable   |          |
| 1453     | 1,300    | 2453     | 650      | Petition to revive – unintentional   |          |
| 1501     | 1,300    | 2501     | 650      | Utility issue fee (or reissue)   |          |
| 1502     | 470      | 2502     | 235      | Design issue fee   |          |
| 1503     | 630      | 2503     | 315      | Plant issue fee  |          |
| 1460     | 130      | 1460     | 130      | Petitions to the Commissioner  |          |
| 1807     | 50       | 1807     | 50       | Processing fee under 37 CFR 1.17 (q)                                       |          |
| 1806     | 180      | 1806     | 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021     | 40       | 8021     | 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809     | 750      | 2809     | 375      | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 1810     | 750      | 2810     | 375      | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 1801     | 750      | 2801     | 375      | Request for Continued Examination (RCE)                                    |          |
| 1802     | 900      | 1802     | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)**

(\$ 0)

**SUBMITTED BY**

Complete (if applicable)

|                   |                  |                                 |        |           |                         |
|-------------------|------------------|---------------------------------|--------|-----------|-------------------------|
| Name (Print/Type) | Tawni L. Wilhelm | Registration No. Attorney/Agent | 47,456 | Telephone | 801-532-1922            |
| Signature         |                  |                                 |        |           | Date      June 23, 2003 |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450